


REMARKS

The present invention is a method of providing a location finding service to mobile stations in a cellular communications network and a cellular communications network with a location finding service. A method of providing a location finding service as illustrated, for example, in Figs. 3-7, to mobile stations MS1 and MS2 in a cellular communications network PLMN1 in accordance with an embodiment of the invention includes sending a request 15, 16, and 17, 21, 22 and 27, and 35 and 36 for location finding information from a mobile station MS1 as a message through the network to a location message server 10 and/or 11; retrieving data from a data store 12 corresponding to location finding information on the cell occupied by at least one mobile station; and sending the data 18, 19 and 20, 28, 29 and 30 and 41 and 42 through the network for the location message server as a message to the mobile station that requested the information; and wherein the method being performed is without pre-registering the mobile station for the location finding service.

Claims 1, 2 and 8-15 stand rejected under 35 U.S.C. §103 as being unpatentable over United States Patent 6,847,823 (Lehikoinen et al) in view of U.S. Publication 2004/0203900 (Cedervall et al). These grounds of rejection are traversed for the following reasons.

Independent claims 1, 8, 12 and 13 respectively recite:

 A method of providing a location finding service to mobile stations in a cellular telecommunications network, comprising:
sending a request for location finding information from a mobile station as a message through the network to a location message server;
retrieving data from a data store corresponding to the location finding information based on the cell occupied by at least one mobile station; and

sending the data through the network from the location message server as a message to the mobile station that requested the location finding information; and wherein

the method being performed is without pre-registering the mobile station for the location information service (emphasis added).

8. A cellular telecommunications network with a location finding service, comprising a location server having an associated data store of data concerning location finding information associated with individual cells of the network, the server being responsive to a request for the location finding information from a mobile station sent as a message through the network and operable to derive data from the data store corresponding to location finding information based on the cell occupied by at least one mobile station, the network being configured to send the data as a message to the mobile station that requested the location finding information, without pre-registering the mobile station for the location finding service.

12. A method of operating a mobile station to receive location finding information from a location finding service in a cellular telecommunications network, comprising:

sending a request for location finding information from a mobile station as a message through the network to a location message server; and

receiving from the location message server, a message containing the location finding information based on the cell occupied by at least one mobile station; and wherein

the method being performed is without pre-registering the mobile station for the location finding service.

13. A mobile station for receiving location finding information from a location finding service in a cellular telecommunications network, comprising:

circuitry operable to send a request for location finding information from a mobile station as a message through the network to a location message server; and

circuitry operable to receive from the location message server, a message containing location finding information based on the cell occupied by at least one mobile station; and wherein

provision of the location finding information being made without pre-registering the mobile station with the location finding service.

There is no counterpart of the claimed location finding service, location finding information, location message server, and without pre-registering the mobile station for the location finding service. Claims 1, 8, 12 and 13 have been amended to recite

a location finding service in conjunction with a request for location finding information and the sending of the data through the network from the location message server as a message to the mobile station that requested the location finding information. This subject matter has no counterpart in Lehtikoinen et al.

Lehtikoinen et al disclose a fundamentally different system in which a request is transmitted from a mobile station for obtaining location dependent services. The location dependent services disclosed by Lehtikoinen et al do not involve a location finding service and are not a request for location finding information from a mobile station as a message transmitted through the network to a location message server as recited in independent claims 1, 8, 12 and 13. While Lehtikoinen et al do disclose a circumstance in which the mobile device transmits a general location to a service provider when a desired information category is not located as discussed in column 7, lines 51-55, the transmission of location information is not a request involving a location finding service in conjunction with location finding information from a mobile station as a message through the network to a location message server and the resultant services are not without pre-registration as recited in the claims.

The Examiner acknowledges that Lehtikoinen et al differs from claims 1, 12 and 13 in not explicitly disclosing an absence of pre-registration as recited in claims 1, 8, 12 and 13. The Examiner relies upon Cedervall et al as disclosing the absence of pre-registration. However, it is submitted that the Cedervall et al does not disclose the absence of pre-registration.

In the first place, while Cedervall et al do disclose in the Abstract and in paragraph 20 that location information is provided to a location based service provider without necessarily providing the identity of the wireless unit, it is submitted

that a person of ordinary skill in the art would not consider this disclosure to meet the recitation of without pre-registering the mobile station for the location finding service as recited in independent claims 1, 8, 12 and 13. As set forth in paragraph 20, what is described is that the identity of the wireless unit may be protected by location information provided to the data network being indexed against the data network address assigned to the wireless unit such that "a service provider and the data network may receive a service request for a wireless unit identified by a data network address, and may receive location information for that data network address, without the identity of the wireless unit or other personal information ever leaving the wireless network." This does not constitute a teaching of the claimed pre-registration. It is submitted that a person of ordinary skill in the art would consider this disclosure to be a mechanism by which at the time of registration the identity of the wireless unit is derived without the necessary disclosure of the identity of the wireless unit since the providing of a data network address is sufficient for satisfying obtaining an identification in the wireless network without providing the identity of the wireless unit. All occurs at the time of the request which is the antithesis of the claimed pre-registration limitation.

Moreover, if the proposed combination of references were made, neither the location finding service involving a request for location finding information and further, the performance of the method without pre-registration of the mobile unit for the location finding service would not be met. Accordingly, the proposed combination of references does not render obvious the subject matter of claims 1, 8, 12 and 13 and dependent claims 2, 9-11, 14 and 15

Claims 3-5 stand rejected under 35 U.S.C. §103 as being unpatentable over Lehikoinen et al in view of Cedervall et al further in view of Thomas. These grounds of rejection are traversed for the following reasons. The citation of Thomas does not cure the deficiencies noted above with respect to the proposed combination of Lehikoinen et al and Cedervall et al.


Claims 6 and 7 stand rejected under 35 U.S.C. §103 as being unpatentable over Lehikoinen et al in view of Cedervall et al further in view of Petty et al. These grounds of rejection are traversed for the following reasons. The citation of Petty et al does not cure the deficiencies noted above with respect to the combination of Lehikoinen et al and Cedervall et al.

In view of the foregoing amendments and remarks, it is submitted that each of the claims in the application is in condition for allowance. Accordingly, early allowance thereof is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 C.F.R. §1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (1076.41061X00) and please credit any excess fees to such Deposit Account.

Respectfully submitted,

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Attachments
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